Chemistry 115 Name

Dr. Cary Willard

Quiz 3A (20 points) February 19, 2009

All work must be shown to receive credit. Use correct significant figures.

1. (5 points) A barrel contains 75.0 kg of ether. If the ether has a density of 0.633 g/ml, how many mL of ether are in the barrel?
2. (5 points) An alloy used to manufacture bicycles contains 12.6% titanium by mass. How many grams of this alloy contain 65.0 grams of titanium?
3. (6 points) When a clean platinum wire is heated in a flame it changes from a lustrous silver color to a dull red color. When the wire is removed from the flame it returns to a lustrous silver color. Is the change that occurs a physical or chemical change? Explain your reasoning.
4. (4 points) Name the following compounds.
   1. C3Br6
   2. Ca3P2

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Quiz 3B (20 points) February 19, 2009

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1. (5 points) A barrel contains 75.0 kg of ether. If the ether has a density of 0.725 g/ml, how many mL of ether are in the barrel?
2. (5 points) An alloy used to manufacture bicycles contains 11.4% titanium by mass. How many grams of this alloy contain 65.0 grams of titanium?
3. (6 points) When a clean platinum wire is heated in a flame it changes from a lustrous silver color to a dull red color. When the wire is removed from the flame it returns to a lustrous silver color. Is the change that occurs a physical or chemical change? Explain your reasoning.
4. (4 points) Name the following compounds.
   1. C4Br8
   2. Mg3N2